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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,084	09/27/2005	Robert Allen Castlebary	PU030099	4381
24498 7590 10/03/2007 JOSEPH J. LAKS, VICE PRESIDENT THOMSON LICENSING LLC PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312			EXAMINER PORTKA, GARY J	
			ART UNIT 2188	PAPER NUMBER
			MAIL DATE 10/03/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/551,084

Applicant(s)

CASTLEBARY, ROBERT ALLEN

Examiner

Gary J. Portka

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>27 Sep 2005</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-12 are presented for examination.

#### ***Claim Objections***

2. Claims 1-12 are objected to because of the following informalities: The claims capitalize "Read Address", but it is not clear what the capitalization implies. Since this term is generally not capitalized, it might be interpreted that the claim language should be interpreted to include all the particulars of the wording as described in the disclosure. Please clarify and/or amend. Claims 1 and 7 also recite "within one a prescribed threshold", which appears to be missing words.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 1 and 7 recite applying addresses at a frequency "on the order of"  $f_n$ . This language is a relative term which renders the claim indefinite. The term "on the order of" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claims 2-6 and 8-12 incorporate this limitation by dependency.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on-sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 6, 7 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Stern et al., US Patent 4,805,198.

8. As to claims 1, 6, 7 and 12, Stern discloses a method and system for reading data from a memory to achieve reduced jitter, comprising applying successive read clock pulses to the memory at a frequency of  $xf_n$  (see Fig. 1, the 20 4X output clock is input to the FIFO) where  $x$  is a whole integer (4) and  $f_n$  is a frequency at which the memory is clocked to write data, applying successive read addresses to the memory at a frequency on the order of  $f_n$  to identify successive locations in the memory for reading when the memory is clocked with read clock pulses to enable reading of samples stored at such successive locations, and altering the duration of at least one successive Read Addresses (oscillator increase or decrease in frequency will alter the duration of the address) in response to memory usage status to maintain memory capacity within at least one a prescribed threshold. See col. 3 line 11 to col. 4 line 12.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stern et al., US Patent 4,805,198, in view of Spalink, US 2007/0116062.

11. As to claims 2-5 and 8-11, Stern does not disclose lengthening or shortening the duration by repeating or skipping reading of fractional samples. Stern adjusts the output by modifying the frequency. However, it was also known that this result could be achieved by lengthening or shortening the durations by repeating or skipping reading of fractional samples. Spalink describes an analogous circuit in which a number of clock skips/inserts is adjusted (see Fig. 3 at 7, 4; also paras. 0031-0032, 0035-0036, and claims 4 and 12). The skips and inserts are analogous to skips and repeats of the present invention, because they are with regard to clocks of a cycle, the cycle being a sample and the clocks therefore a fractional sample. This timing adjustment to reduce jitter, in lieu of an adjustable oscillator such as in Stern, provides the benefit of allowing use of a free-running oscillator instead of VCO, and which then further enables integration of the cycle synchronization circuit onto a single chip (para. 0040). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to lengthen or shorten the duration by repeating or skipping reading of fractional samples, instead of adjusting the oscillator frequency, because the former was known to provide a more easily built circuit including a free-running oscillator and the integration of the synchronization circuitry onto a single chip.

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**Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent No;

6,801,706 Jitter correcting apparatus for video signals.

5,428,649 Elastic buffer with input and output side skip signals.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J. Portka whose telephone number is (571) 272-4211. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gary J Portka  
Primary Examiner  
Art Unit 2188

September 25, 2007

**GARY PORTKA**  
**PRIMARY EXAMINER**

